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A Challenge to Our Cities

Realism in Traffic Education

Fire Prevention in Accidents

TRAFFIC DIGEST & Review

THE TRAFFIC INSTITUTE · NORTHWESTERN UNIVERSITY

The *Traffic Digest & Review*

OF THE TRAFFIC INSTITUTE, NORTHWESTERN UNIVERSITY

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Gerald O'Connell	*Director of Training and Extension*
James M. Slavin	*Assistant Director of Training*
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This publication is produced to serve as a source of information and a medium for the expression of responsible opinion in the street and highway traffic field. From time to time there will appear herein expressions of opinion that do not necessarily reflect official Traffic Institute policy.

In This Issue

Realism in Traffic Education, *by Robert B. Leopold* 1

Traffic—A Challenge to Our Cities, *by Franklin M. Kreml* 4

Topeka's Use of Portable Traffic Signals, *by John C. Dillon* 9

Reveal New Data on Chemical Tests . . 11

Memo to Police Supervisors, *by James M. Slavin* 13

Adult Driver Education Recommendations . 17

Traffic Deaths 18

Know the Law 20

Fire Prevention in Connection with Traffic Accidents 23

Index to Traffic Digest & Review 33

Training Calendar 37

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Realism in Traffic Education

by
ROBERT B. LEOPOLD
Managing Director
Atlanta Traffic and Safety Council

FOR MANY YEARS the experts have been telling the laymen that the answer to the traffic problem is the magic formula of the 3 E's. Personally, I like to put a fourth leg under the stool—legislation. I think this leg is equally important and makes a more solid structure.

In the 3-E prescription, however, one very important thing is frequently overlooked. Engineering or enforcement do not of themselves spell anything in the solution of the traffic problem. We cannot say that since we have a traffic engineer, our traffic engineering problems will be solved. Neither can we say that we have a police department and traffic court, ergo we have enforcement. The quality and adequacy of these functions determine their effectiveness.

By the same token, none of these 3-E's can operate in a vacuum or independently of the others. They are definitely related and dependent. This means that we cannot set up to do a traffic education job without concerning ourselves with the quality and adequacy of legislation, enforcement, and engineering. To do otherwise is an almost total waste of time and money, and will merely result in confusing the public. Education without the backing of proper laws, enforcement, and engineering is all but futile.

In too many communities traffic education is undertaken as a separate operation which implies that the proper functioning of the other phases of traffic control are taken for granted. Such a situation, for example, affords a perfect opportunity for the police department to alibi a bad traffic record by saying that lack of education is the reason.

Let us pause for a moment to consider just what the traffic education function really is. Is it posters—press releases—radio and television spots? Admittedly these and other public information promotions have their place. If we follow through on this campaign, have we done the most effective job possible? To get our answer we must first have an understanding of what traffic education is and how it can be infused in the public mind.

At the outset, we must divide the public into two classifications—the adults and the juveniles. Each of these classifications must be approached by entirely different methods. The juveniles can absorb traffic safety through the academic process. This should properly be a part of

their schooling. Enforcement plays a relatively minor part in developing safe citizens if we start with them during the formative period of learning and fixing their life habits. On the other hand, adults learn by doing. Their thinking and habits are the result of their experience.

If I were asked to establish percentages, I would say that traffic education, treated academically, is 90 per cent effective with school-age youngsters, while conversely, it is only 10 per cent effective with adults. With respect to the youngsters then, our duty is clear. Get traffic education with all that it implies in the school curriculum, with supplemental school patrol and other activities to provide the needed disciplinary training.

Adults, however, pose an entirely different problem. If, in their case, exposure to traffic safety propaganda is only 10 per cent effective, then the other 90 per cent can only be one thing—enforcement. History bears this out. The traffic record of every state and community in America is in direct ratio to the degree of perfection attained in the enforcement methods used. Theoretically at least, the ultimate in enforcement could produce a perfect traffic record so far as the human element is concerned.

Now that we have analyzed the problem, let us see what we actually do by way of correction through our traffic education programs.

Isn't our purpose to reduce accidents? To attain this objective, don't we try to upgrade our police departments to use the proven effective method of selective enforcement? Then why should we be talking about night traffic hazards, when selective enforcement has emphasis on turning movements as the chief cause of local accidents? Should not the educational promotion be tied directly to the local enforcement emphasis? It is the only realistic approach. No other course can be logically defended.

We all accept the premise that traffic education, to be effective, must be tied to a sound enforcement program, and that a sound enforcement program must be selective in character. Doesn't it logically follow that the educational theme should be identical with and tied to the local enforcement emphasis which is based on the local accident experience? This is the plan we have adopted in Atlanta. I would call it Selective Traffic Education. Thus, our educational efforts are directed toward specific accident-causing violations in the order of their importance.

Here's how we went about building our program. First, we appointed a committee on Traffic Education and Enforcement. It is headed by an interested banker and consists of 17 carefully selected and interested members, among them our four city officials concerned with traffic —the

chief traffic judge, chief of police, chairman of the Police Committee of the City Council, and the city traffic engineer. Note that we combine education and enforcement in one committee.

Within this committee we have two sub-committees, each headed by a businessman. One is on Enforcement and consists of six members and the other is on Education and has five members. The committee as a whole meets monthly and functions as a board of directors in that it determines policy, approves programs and acts on reports and recommendations from the sub-committees. The sub-committees implement the programs on education and enforcement respectively, under the direction of the main committee.

First, we made a thorough study of the traffic accident records to determine the leading causes. Then, a companion study brought out the major enforcement problems as related to these leading causes of accidents. With this basic data, three major educational campaigns were approved in the following priority order:

1. Turning Movements and Signals

2. Cutting In and Improper Passing

3. Speed and Following Too Close

In all probability these three campaigns will take a full year to carry out. Our first campaign on Turning Movements and Signals will be sustained intensively for an indefinite period until the accident curve on turning movement and signal violations is brought down to an acceptable minimum. Then, we will start the number two educational campaign. I will not discuss the enforcement side of the picture except to say that it is synchronized with the educational campaign.

Thus traffic education becomes a cooperative and joint function—Selective Enforcement supported by Selective Education, striking at the number one cause of traffic accidents in our own community. By this method, and only by this method, can we get results in adult traffic education.

Both the enforcement emphasis and the supporting educational program should be continuously sustained until the accident frequency caused by the particular violation being dealt with is brought down to an acceptable level. This will likely require several months. No one can say we are going to have a campaign for one month and expect it to produce worthwhile results.

Traffic—A Challenge to Our Cities

by

FRANKLIN M. KREML
Director
The Traffic Institute, Northwestern University

and

Traffic Division, International Association of
Chiefs of Police

(This is a condensation of the remarks made by Mr. Kreml in a panel discussion on "Traffic and Transit Problems" at the recent International Municipal Congress in Montreal.)

THE IMPORTANCE of the problems related to street and highway traffic certainly is appreciated by all participants in this great congress—to a far greater extent than by any other group. For, while these problems are of real concern to all responsible citizens of both our countries, they are primarily and essentially problems of public administration. A satisfactory approach to these problems is, at this moment, a matter of economic and social survival in many of our respective jurisdictions.

Let us look at traffic congestion. This problem arises chiefly from the inefficient use of the street and highway space available and localized shortages of such space. It is a part of the larger problem of street transportation, including safety.

There is no question that the motor vehicle today is a basic form of transportation. We could not get along in our presently constituted society without cars, trucks, and busses. This was true, of course, before World War II, but the tremendous increase in the use of the motor vehicle in the last decade brings this into even sharper focus. In the United States our motor vehicle registration has increased from 29 million in 1945 to nearly 55 million in 1953. In the same period the Canadian registration has doubled—from one and one-half to three million. The forecast for California is that its present registration, in excess of five million, will be twice that in 20 years.

The problem is to keep traffic moving—safely and efficiently, and to provide adequate facilities for parking, loading and unloading. Unless this problem is solved, cities will stagnate and decentralization will be accelerated at an unhealthy rate. Great will be the losses in tax income, with consequent reductions in the quality and quantity of such basic services as schools, health, police and fire protection. The alternative is

a sharp increase in tax rates which of course will further accelerate decentralization.

But a breakdown in our transportation system can have greater and far reaching effects. Too rapid decentralization of our cities can cause an economic blight from which there may be no recovery. Sociologically, deterioration of neighborhoods from lack of traffic planning and homes broken by traffic accidents open the door to delinquency and other serious social ills. Politically, will not our citizens begin to wonder about democracy's seeming inability to cope with this pressing domestic problem?

Long-range improvements must include more streets, more expressways, and more parking spaces. But these take time and a great deal of money. We must make better use of what we now have—and much more can be done with what we have than is generally appreciated.

There is a great need for study, planning, coordination, and execution of an effective program by municipal government in coordination with county and state government. This is the problem in most cities today. The municipal government is not prepared to study, plan, coordinate, and execute a program with sufficient speed or on a sufficiently broad scale to stay abreast of the explosively expanding problem.

Traffic administration involves work of engineers, police, courts, schools, public information and education agencies, the city planning group and transit authority, and contemplates street and traffic studies, coordinated with general transportation, coordinated in turn with the city plan of development.

Traffic is not only a complex problem, but the approach of government to its solution involves many of its departments and agencies and requires unusual coordination in planning and action. It is a problem in the same category of importance as public housing, finance, crime, juvenile delinquency, vice. It will not be overcome by half measures.

There are those who would resolve the traffic problem by creating a department of traffic with full authority and responsibility. This violates our concept of governmental organization. It would require bureaus in the new department duplicating work of bureaus in present departments, as for examples, engineering and enforcement. Further, while decreasing the problem of coordination in the area of traffic, it would increase this problem in other areas of operations. Lastly, such a solution, if indeed it would be a solution, would be almost prohibitively expensive.

There are several requirements for solution of this administrative aspect of the traffic problem:

First, there must be a proper positioning of the several diverse governmental responsibilities within the structure of government. As examples, the enforcement of our traffic laws and the supervision of vehicular and

pedestrian movement are responsibilities of the police. The adjudication of traffic cases, the conducting of traffic violations bureaus and violator schools are responsibilities of the court. The traffic engineering function is a job for the city's engineering department. Driver training should be handled by the schools. The development of adequate public information and general public education and development of adequate public support for the official program should be in the hands of a civic agency, such as a safety council or traffic board.

Second, there must be adequate staff for the several responsible agencies. Some departments, such as the Traffic Engineering Bureau in Chicago in 1947, can operate only on a complaint basis because of inadequate staff. Without staff for planning, as well as doing, no broad attack can be made on the problem.

Third, staff must be adequately trained. Here we have no academically trained ranks to draw from. In-service training, at least for many years to come, is our only means of accomplishing this part of the job. As examples, this in-service training is available for engineers at Yale and the University of California; for enforcement officers at Northwestern University; for driver training teachers at New York University; for public safety organization executives through the National Safety Council, and for court officials through the conference program of the American Bar Association.

Fourth, the operational budget must be adequate to permit substantial activity of a type that will cut into the problem. This means, in most cases, a much greater expenditure than at present, but actually most communities are now paying for programs they are not getting.

Fifth, there must be tight coordination of all activities. Theoretically this should be the mayor's job, but only in rare cases, does the mayor have the time for his important work. This coordination must be on a three-level basis: 1) coordination of *all traffic* activities; 2) coordination of traffic activities with all types of transportation and 3) over-all coordination with the general city plan.

Sixth, the traffic program must be vigorously executed. The mayor must provide strong leadership to get adequate official action.

Seventh, there must be citizen leadership for a strongly organized, well financed, and adequately staffed public information and public support organization.

To assist municipal governments to effect such an administrative program, millions of dollars are provided various national traffic and safety organizations each year by interested industries—particularly in the automotive and insurance industries.

In the training area, awards are available for engineers to study at Yale, for teachers to train at New York University, and for enforcement personnel, including judges and prosecutors, at Northwestern University—to mention specific examples. Cost-free training is available for community organization executives through the National Safety Council and for driver training instructors through the American Automobile Association.

Field assistance is available to police departments through the International Association of Chiefs of Police; to courts through the American Bar Association; to engineers and administrators (general appraisal of administrative needs) through the Traffic Institute of Northwestern University; to community safety organizations through the National Safety Council, and to schools through the American Automobile Association and New York University.

Within certain states, assistance is offered in training and field service—at Purdue University, the University of California, and Pennsylvania State College. Field service is available to cities in New York State through an insurance safety program.

The type of traffic administrative program here outlined makes staggering demands. But the problem is demanding and it must be met. Moreover it can be met. In some outstanding municipal jurisdictions with leadership combining vision and energy, appropriate steps are being taken in the direction of meeting basic requirements. Somehow, the job must be done by all communities.

There is no longer a matter of administrative discretion. Time and progress will not wait for enough funds or personnel, enough knowledge and skill. Every advantage must be taken of every available source, and action must be taken now which is more nearly commensurate with the facts.

* * *

"HOMEWORK" PRESCRIBED FOR TEEN-AGE VIOLATORS

Teen-age traffic violators in West Virginia will have added homework if they should happen to be haled into the court of Circuit Judge Donald Black in Parkersburg.

When a young motorist is arraigned for the first time for reckless driving or speeding, his license is revoked for 60 to 90 days.

During this time he must write in longhand all provisions of the city motor code, all state laws on operation of motor vehicles and compute the distance an auto travels at the speed of 15 miles an hour in one second, up to the speed the offender was traveling when he was arrested.

Northwestern University Establishes Transportation Center

The establishment of a national Transportation Center at Northwestern University was announced in December by President J. Roscoe Miller.

The new Center will carry on a program of research, undergraduate training, and graduate study aimed at the solution of major problems in the highway, rail, air, pipeline and water divisions of the nation's transportation industry.

The Center is a joint undertaking of the University's School of Commerce, Technological Institute, and Traffic Institute. Several other divisions of the University will also participate.

An advisory committee of business and professional men interested in transportation will be formed to aid the University in the formulation and direction of the Center's activities.

"Transportation is such a vital factor in modern living," said President Miller, "that it seems desirable to expand the work of Northwestern University in this field. Because of its rapid development, transportation has become increasingly complex and has created many unsolved problems—economic, technical, and social.

"Northwestern University is admirably situated for transportation research and education. We have already done a great deal of work in this field, and we believe that, with adequate support, we can make a substantially greater and more effective contribution through our new Transportation Center."

The following have been appointed to the University Committee charged with the initial direction and planning of the Transportation Center: Stanley Berge, professor of transportation, and Leon A. Bosch, director of the Graduate Division, School of Commrece; Burgess H. Jennings, chairman of mechanical engineering, and Carl W. Muhlenbruch, professor of civil engineering, Technological Institute; George W. Barton, traffic engineering consultant for the Traffic Institute, and Franklin M. Kreml, director, Traffic Institute. Mr. Kreml is serving as chairman of the committee.

* * *

AAMVA Elects 1953-54 Officers

Albert J. Veglia, registrar of vehicles of California, is the new president of the American Association of Motor Vehicle Administrators. He was elected for 1953-54 at the recent annual conference of the AAMVA in Richmond, Va.

Other officers for the new year are: *First vice president*, Harold I. Goss, secretary of state of Maine; *second vice president*, Robert B. Baillie, commissioner of taxation and registrar of motor vehicles of Manitoba, and *secretary*, Chester H. Lamb, acting commissioner, Motor Vehicle Division of Virginia.

Topeka's Use of Portable Traffic Signals

by

Lt. John C. Dillon
Traffic Division
Topeka, Kan., Police Department

In 1951, Topeka, with a population of 85,000, and, like so many other cities, with an undermanned Police Department, was faced with a serious problem. To move traffic as efficiently as possible meant that all officers available had to be assigned at peak times to work traffic at intersections which normally didn't require any kind of control. The result of this was that there was practically no enforcement when it was needed the most.

Our Department decided to purchase three portable signals in an effort to expedite peak traffic. The three signals were put in operation, relieving three men from these intersections. The results were so satisfactory that to date we have seven of the portable signals in operation.

Our portable signals have been used primarily at intersections during peak traffic time. However, we have also used them to advantage during Fair Week, at intersections where we have heavy pedestrian traffic, and as temporary measures at intersections where permanent traffic signals have been approved, but not yet installed.

The initial cost of the portable traffic signal, complete with remote control, is approximately $795.

During the first year or two that the signals were in use there were some changes that had to be made because we were in the experimental stage. New timers were developed for the signals, and they proved so successful that we now have very little trouble with the signals. The only thing we have to contend with is the batteries. We did have trouble keeping the batteries up in the signals, but this problem has been solved by buying two spare batteries, and through a system of rotating them every day, we have eliminated this trouble. At the present time our problem of maintenance is very small.

To departments in cities comparable to the size of Topeka, we highly recommend the portable traffic signal. We have found that not only are the signals a great help in controlling traffic, but our officers are relieved of directing traffic at peak periods and made available for other duties. The effectiveness of this signal in the handling of the particular kind of traffic that we use it for more than makes up for the minor problem of transportation and maintenance.

Vermont Checks for Carbon Monoxide

In an effort to determine to what degree carbon monoxide affects motorists and to what extent such concentration of the deadly fumes may contribute to traffic accidents, by reason of drowsiness, weakness or slowed reaction, the Vermont State Police conducted a survey of vehicles being operated on Vermont highways.

In January 1953, Commissioner of Public Safety William H. Baumann assigned two state troopers to work with the state pathologist, Dr. Joseph W. Spelman, in detecting that unsuspected but deadly enemy, carbon monoxide.

Working on bitterly cold days when motorists were driving with windows closed and heaters operating at full capacity, the troopers and Dr. Spelman halted moving traffic and tested the vehicle interiors with carbon monoxide indicators.

The results showed that of the 114 vehicles tested, four had concentrations of 0.1 per cent, which is considered dangerous, and 13 contained concentrations of .005 per cent and over. Vehicles checked included passenger cars, busses, trucks and tractor trailers. Of the four vehicles found with dangerous concentrations, one was a 1952 model sedan, one a 1937 model sedan equipped with a manifold heating system, and two were tractor trailer trucks.

Further tests will be made under varying conditions.

* * *

PLAN CURVES TO MAKE OHIO TOLL ROAD SAFER

Constant curvature, even where the road could be made ruler-straight, will be a feature of the 241-mile toll turnpike to be constructed across Ohio from Pennsylvania to the Indiana border. Purpose of the curvature is to help keep the drivers alert at all times.

The turnpike, expected to be completed about June, 1955, will connect with its Pennsylvania counterpart and will have other features besides curvature to help make it safer. For example, the median strip dividing opposing lanes of traffic will be a minimum of 56 feet wide, as compared with the 10-foot strip of the Pensylvania turnpike.

The new Ohio toll road will run in a northwesterly direction, passing near Cleveland and Toledo. Just south of the Michigan state line it will reach the Indiana border, where it will connect with an Indiana turnpike now under discussion.

—AAMVA Bulletin

* * *

The only thing that doesn't work right when it is fixed is a traffic citation.

Reveal New Data on Chemical Tests

BREATH TESTS for intoxication, some of which use balloons for breath samples, have been proved to be puncture-proof.

The National Safety Council has announced that even the sharpest arguments against the accuracy of such tests in prosecuting drinking drivers no longer can explode their reliability.

The proof came from Michigan State College, where a scientific research project began in 1948 to evaluate various chemical tests for intoxication has been concluded.

In addition to the breath method, blood and urine tests also were studied. Blood tests were found to be consistently accurate, but tests of urine were reported to be less reliable than any of the other methods unless two specimens were taken an hour apart. Breath and urine tests are the most common field methods, since blood samples must be taken under clinical conditions.

An important secondary finding of the research group was that a closer definition can be made of the limits of alcoholic influence—whether a person's degree of intoxication can be termed "safe," "possible," "probable" or "definite."

The research was requested by the Committee on Tests for Intoxication of the National Safety Council, which made the necessary funds available to the Department of Police Administration at Michigan State College.

"Because of the rapid growth of motor vehicle traffic and the difficulty of establishing criminal responsibility in so-called drunk driving cases, the reliability of investigative procedures employed by law enforcement officers has become increasingly important," the introduction to the report states. "One serious stumbling block in the use of the more convenient methods of measuring blood alcohol concentration by breath or urine analysis has been the rather wide divergence of scientific opinion concerning their reliability."

To study these relationships under practical conditions and to provide conclusive answers to the questions, the researchers made 1,700 analyses of 127 human subjects—all adult males in good health representing various social, economic and professional levels.

To approximate conditions confronting law enforcement agencies, the subjects were tested four at a time in a normal social drinking environment. The sessions began at 7 p.m. and continued for five to seven hours, with data kept on the nature of food consumed before the test, age, height, weight, etc.

Bourbon whiskey of 100 proof was offered, with or without a mix as the drinker preferred, and each was encouraged to drink at his normal

pace, although an attempt was made to have each person complete a drink in 15 to 20 minutes. Hors d'oeuvres were served throughout the evening.

Four psychological tests were given to each subject by trained observers. In addition to observations of gross appearance, coordination and speaking ability, each subject was interviewed concerning his personal opinion of his ability to operate a motor vehicle with safety.

Three breath testing devices were studied—the drunkometer, intoximeter, and alcometer—and the results obtained were in close agreement, according to the report.

"With a proper interpretation of the results obtained by analysis of either the blood or breath, the methods may be used with confidence and the results obtained will be reliable," the report states.

While the researchers made no attempt to define intoxication, they found that the usual 0.15 per cent dividing line between the "drunk" and the "sober" is not supported by fact. Most of the subjects with 0.12 or 0.13 per cent alcohol in their blood were decidedly impaired with respect to their automobile driving capabilities, the scientists found.

"Serious consideration should be given to a downward revision of this figure which has become so firmly entrenched," the report states. "Greater emphasis should be placed on corroborating factors which are invariably brought to light in the borderline cases.

"It is recommended that the lines of demarcation be amplified in the following manner: 0.00-0.05 per cent, safe; 0.05-0.10 per cent, possibly under the influence; 0.10-0.15 per cent, probably under the influence; above 0.15 per cent, definitely under the influence.

"The results of a chemical analysis should not be the sole criterion upon which an officer's judgment is based. The results should be employed to confirm conclusions drawn from clinical and physical diagnoses."

The research was directed by Prof. Ralph F. Turner, of the Police Administration Department, with collaboration by Dr. C. W. Muehlberger, director of the state crime detection laboratory at the Michigan State Department of Health, and William B. Bennett and Edward S. Cestaric, graduate students in bio-chemistry.

* * *

ADJUDICATION OF JUVENILE TRAFFIC CASES

Act V, Uniform Vehicle Code, Sec. 186 (c)-Footnote— "It is recommended that jurisdiction over juvenile traffic offenders be vested in the traffic courts except where juvenile delinquency involves offenses in addition to or other than traffic offenses. In such latter event, jurisdiction should be vested as at present in most cities in the juvenile court."

Memo to: POLICE SUPERVISORS—ALL RANKS

From: JAMES M. SLAVIN, ASSISTANT DIRECTOR OF TRAINING, THE TRAFFIC INSTITUTE.

Subject: WHO ARE THE MEN IN YOUR COMMAND?

1. At first glance the subject of this memorandum may appear to be an elementary, almost senseless, question. It is generally answered in real life situations by a list of names, i.e., Patrolmen Harry Jones, Samuel Brick, William Brown or Sergeants Wilson, Black, etc. These are not men, but only labels[1] indicating persons—persons with likes and dislikes, beliefs and disbeliefs; fears, ideas, emotions, etc. It is impossible, of course, to wrap into one package all the qualities, abilities, and characteristics which make up a person by the use of one word. Therefore, by being able to recite the names of the men in his command, a supervisor has not answered the subject question.

2. We may, possibly, be able to answer the question more properly if we add another word to the man's name. This is not uncommon practice in police departments and it may further identify each person of a command. For example, some supervisors reply to the subject question in this manner: Ptlm. Harry Jones, a radical; Ptlm. Samuel Brick, a griper; Sgt. Charles Wilson, a disloyal officer; Sgt. Peter Black, a good fellow, excellent worker. But, these words, too, are just labels and cannot tell anything important until they are expanded and given factual content, etc.

3. More progressive departments, more progressive supervisors answer the subject question by saying, "Let's take a look at their personnel records," and so we find that the men in these departments, who work for these kind of supervisors, are to be found in a manila folder containing various sheets of paper usually about 8½ x 11 inches in size. These papers are frequently letters from citizens praising or complaining about the officer. If the praiseworthy letters exceed the complaints, the officer is usually described as "one of the best." If the complaints are greater in number, the officer is "lacking in good judgment" or "doesn't have or use common sense."

Whether the letters of commendation from citizens were solicited by the officer or the letters of complaint produced by the officer keeping busy and making an increased number of contacts with the public as compared to the number of contacts made by other officers in his group is sometimes not known or taken into consideration by those who sit in judgment.

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[1]Chapter "On Looking at Labels" from *How Do You Talk About People*, by Irving J. Lee, Published 1950 by Anti-Defamation League, B'nai B'rith.

It is not an unusual or rare experience to talk with supervisors about their men and hear them say:

1. "I have never been able to figure John out."

2. "Bert is a malcontent, a cry-baby—a complainer, etc."

3. "Henry is a fine officer. You can give him a job to do or post him at a detail and then forget him. He is very dependable and does just what he is told to do."

There is little room for argument with the supervisor's opinion of his men. However, the basis of his opinion—fact or speculation—opens wide the question, "Who are the men in your command?" Patrolmen Jones, Brick, Brown; Sergeants Wilson, Black, etc., are not sufficiently described by their names. What can you tell about the differences between men named William R. Board and William D. Board? Secondly, they are not sufficiently known or described by adding another word to the name such as dependable, radical, disloyal, griper, Third, the officers, complex human beings, cannot be adequately known or described by personnel files.

There is no need to belabor you with more discussion of the inadequacy of the number one package. Number two, however, may be worthy of more thought. The addition of a second word to the man's name to describe him as a person may do a pretty good job of describing the man. All too often it is a name applied to an officer because of rumor, an isolated experience, misinterpretation of his acts and interests by commanding officers and most importantly because of failure on the part of supervisors to talk with their men and investigate to determine the *kind* of people they really are.

Let's see how Mr. Webster defines "investigate": *To follow up by patient inquiry or observation; to inquire and examine into with systematic attention to detail and relationship.*

The shameful and almost pitiful example is found in the case of the officer who has a superior amount of basic intelligence as measured by any known valid measuring device, and who has been a member of the department for as many as eight to ten years; who has the potential for effective leadership as evidenced by the positions he holds in civic organizations but is heartily disliked by his superiors—by most of his fellow officers, whose opinions are conditioned by the Boss's opinions. "John is a very intelligent person but I could not trust him as far as I could throw a bull by the tail. He is a dissenter, a griper, a guard house lawyer," are statements sometimes made by supervisors about this type of person. Questions such as, "What has he done which is deceitful and evidence of untrustworthiness?" are answered by, "I heard, I was told."

Questions such as, "Are his gripes, even though irritating, based on fact or is he entirely unjust in his criticism of the department?" are an-

swered by, "Well, our department is not perfectly operated and I guess there is some basis for complaint."

Questions such as, "Do the officers who read roll call permit questioning for further explanation of orders; can an officer *comfortably* go to his immediate supervisor and ask for further clarification after roll call?" are sometimes answered by, "Any man can ask any officer on this department any reasonable question and get a reasonable answer." Yet one would not have to search very long in most police departments files to find examples of the results of unsatisfactory answers to questions asked by citizens of police officers. The results can indicate that (1) questions are not always easy to answer (2) someone was not able to *comfortably* ask a question of an officer.

Improved use of men assigned to any command is dependent in large measure on how well they are understood and known as individuals. Such knowledge and understanding are equally if not more important than the use of sound principles of organization; pay scales adjusted to cost of living index; length of work week and the many other conditions which most everyone agrees are so important to the kind of job produced by the group.

Real understanding, as real as we are ever able to understand the complex animal called man, can only come from sincere interest in him as a person; providing him with *comfortable* opportunities to talk to his bosses about his ideas, beliefs, attitudes—particularly, an opportunity to be heard regarding "*Why*" he believes this is good, this is bad—this is the best way or this is not the best way. This statement regarding real understanding is based upon the conviction that when we discuss "What the man said" we are on a pretty solid foundation. Few serious errors are made in this discussion. On the other hand, when we discuss "*Why* he said what he did," we are in a highly speculative area and the possible conclusions are almost unlimited. There is, of course, a way in which we can reduce the number of possible conclusions and make the conclusions as factual as possible. Demonstrate your interest in his reasons for making the statement by privately talking with him about the reasons why.

For example: In most departments it is not an unusual experience for a supervisory officer to read an order at roll call to a squad and then overhear a member of the squad criticizing or ridiculing to the other squad members. It is not too difficult to find examples of sergeants who, when meeting their men in the field, ridicule and criticize orders given by the commanding officer of the department, division, shift or relief. It is in this way that we "learn" that Patrolman Harry Jones is a radical or that Sergeant Wilson is disloyal. Neither of these men may be exercising the best judgment in speaking their mind so freely, but the only possible conclusion is not necessarily that they are radicals, dissenters, disloyal.

If this commanding officer had the courage to and would take the time to ask them why they felt the way they have so indicated about the order, it might be found that the order, as given, was not possible, practical or easily understood. Is this order clear to you, "Patrolmen are again cautioned not to have unnecessary conversation with persons to whom they are issuing traffic tickets"? What is unnecessary conversation? Where can I find out? How much is too much? The answers to these questions are essential to compliance with the order. Unfortunately, no one knows the answer. If the sergeant or lieutenant is questioned, he may become defensive and irritable, or he may say, "Just a matter of common sense." But what is common sense—how is it measured—how can I know that my handling of the situation is adequate to the sergeant's definition of common sense?

The question "Who are the men in your command?" will be more specifically and effectively answered by commanding officers who recognize that:

1. Every person in their command is an individual, a highly complex animal, more different one from another—in the most important areas—than similar to each other.

2. He cannot be sufficiently described or contained in the best personnel record system.

3. Although the *man said* or *did this;* there are *many* possible *reasons why*. These can be reduced in number and often times limited to one, when and if the individual is give a *fair* and *comfortable* opportunity to explain his "why."

It has been said that the more one knows about a subject the better his judgments concerning the subject will be. How can we ever know much of anything about other people, particularly our fellow workers, if the lines of communication are down or have never been completely connected?

A chief of police while talking to a class of recruits on their first day in school had this to say, "This department is fully aware and wants you to know that we have not hired so many additional police badges; so many night sticks or so many uniforms. We do fully understand that we have hired 35 individuals—persons. You are here as the result of selective and critical examinations. We are glad to welcome you into our pleasant, productive and self-satisfying family. We shall, I pledge you, remember that you are individuals and treat and deal with you on that basis. You will not become just a badge number in this department."

Is this recognized and followed in your department, division or squad? Is this not a basic, essential belief which must predicate all relationships between you and your men? If it is not, how do you reply to the question, "Who are the men in your command?"?

Adult Driver Education Recommendations Stated

The National Conference on Driver Education conducted in November at Michigan State College extended its discussions beyond high school training to include adult driver training.

The discussions in the latter field resulted in pertinent recommendations. Some of these, in capsule form, are given below:

Adult driver educations falls within the competency and responsibility of public schools.

The objectives of adult (driver) education are essentially the same as those for school age youth but they may need special emphasis to be most effective.

Programs should be developed with the advice and counsel of representatives from industrial, professional, and business groups.

There should be some state supervision of licensing, operation and control of all driver education schools. The office of the chief state school officer should set standards for all public, private and commercial schools of driving.

Personnel of adult driver education programs should cooperate with traffic enforcement agencies to promote programs of remedial instruction.

Refresher courses have a definite place in the ADE program, the extent to which they are offered depending upon local conditions.

Adult driver education programs, including both classroom and practice driving, should be tax-supported to the same extent as any other subject in the adult education program.

Teachers in adult driver education programs should meet the same requirements for certification as teachers of high school driver education.

* * *

Students Hold "Take It Easy" Auto Race

In Manchester, Mich., high school students held a new kind of race. Winners were the contestants who eked the best mileage out of their vehicles, over the 109-mile course. In order to equalize the chances of youngsters driving heavy cars, winners were selected on the basis of ton-miles per gallon.

The contest served to point up the relationship between economical driving and safe driving. The course included urban and rural stretches, and, according to *Automobile Facts* which reported the race, the winner "gauged the stop lights so expertly he had to stop for only three" of the 15 lights that dotted the route. The "Take It Easy" race, under the partial sponsorship of the high school's driver education class, aroused the interest of the whole community. The youngsters want to schedule it as a yearly event.

'53 Traffic Deaths Same as '52

THE BIGGEST monthly drop in traffic deaths since May of 1949 occurred in November, and as a result the National Safety Council estimated on January 1 that the 1953 traffic toll would be 38,000—the same as in 1952.

It was the first year since 1949 that traffic deaths have not gone up, the Council said—and all the more remarkable because the travel boom continued unabated.

Mileage was up an estimated 5 per cent for 1953. With the unchanged death toll, this resulted in a mileage death rate (deaths per 100,000,000 miles) of 6.9—the lowest for any year in the history of traffic accident records.

The three-year upward trend of traffic deaths continued as 1953 opened, piling up 500 more deaths in the first four months, the Council said. In May the upward surge was halted, and except for a slight increase in July, the nation's improved traffic behavior gained back 400 lives in the next seven months with the greatest improvement coming in November.

The Council said that while the 1953 death toll was unchanged, preliminary reports indicate that traffic accident injuries were about 4 per cent greater.

The November death toll was 3,320, a drop of 8 per cent from the 3,610 total for the corresponding month of 1952. For 11 months, deaths totaled 34,380, almost the same as 1952's 11-month figure of 34,280.

For November, 27 of 44 reporting states had fewer deaths than in the corresponding period of 1952. Only 17 states had more deaths. The number of states showing improvement for 11 months totaled 18, with 24 having more deaths and two showing no change.

The 18 states with fewer deaths for 11 months were:

Utah	−20%	South Carolina	− 6%
Oregon	−18%	Mississippi	− 6%
Washington	−13%	California	− 5%
Colorado	−12%	Virginia	− 5%
New Jersey	−10%	Arkansas	− 5%
Oklahoma	− 8%	Wisconsin	− 2%
Idaho	− 8%	Wyoming	− 2%
Texas	− 6%	Pennsylvania	− 1%
Georgia	− 6%	Missouri	− 1%

The 483 cities reporting for November had an average improvement about the same as that of the entire nation. Thus the favorable change in the total traffic picture in November extended to both urban and rural areas.

For 11 months, however, deaths in urban areas were 2 per cent higher, indicating that the unchanged death total for the entire nation was accomplished by a decrease in deaths in rural areas, the Council said.

Of the 483 cities reporting for November, 107 had fewer deaths, 103 had more deaths, and 273 showed no change.

Perfect records in November were reported by 318 cities, the three largest of which were San Antonio, Tex. (440,400); Long Beach, Calif. (250,800), and Norfolk, Va. (213,500).

Cities still having perfect records at the end of 13 months totaled 78, and the three largest were Mt. Vernon, N. Y. (71,900); Raleigh, N. C. (65,700), and Lancaster, Pa. (63,800).

Of the cities with fewer deaths at the end of 11 months, the following have populations of more than 200,000:

Denver, Colo.	−47%	Toledo, Ohio	−18%
Omaha, Nebr.	−45%	Louisville, Ky.	−17%
Jacksonville, Fla.	−32%	Pittsburgh, Pa.	−16%
Seattle, Wash.	−31%	Chicago, Ill.	−13%
Atlanta, Ga.	−28%	St. Louis, Mo.	−13%
Long Beach, Caliv.	−27%	Richmond, Va.	−13%
San Diego, Calif.	−25%	Baltimore, Md.	− 8%
Syracuse, N. Y.	−25%	Worcester, Mass.	− 6%
Dayton, Ohio	−21%	San Antonio, Tex.	− 2%
		Indianapolis, Ind.	− 2%

The three leading cities in each population group for 11 months, ranked according to the number of deaths per 10,000 registered vehicles, were:

	Reg. Rate		Reg. Rate
Over 1,000,000 Population		**200,000-350,000 Population**	
Los Angeles, Calif.	3.0	Providence, R. I.	1.2
Detroit, Mich.	3.2	Omaha, Nebr.	1.3
Philadelphia, Pa.	4.0	Syracuse, N. Y.	1.4
750,000-1,000,000 Population		**100,000-200,000 Population**	
San Francisco, Calif.	2.5	Wilmington, Del.	0.5
Washington, D. C.	3.1	Youngstown, Ohio	1.1
St. Louis, Mo.	3.2	Phoenix, Ariz.	1.1
500,000-750,000 Population		**50,000-100,000 Population**	
Minneapolis, Minn.	2.4	Raleigh, N. C.	0.0
Pittsburgh, Pa.	2.7	Lancaster, Pa.	0.0
Milwaukee, Wis.	2.8	Mt. Vernon, N. Y.	0.0
350,00-500,000 Population		**25,000-50,000 Population**	
Denver, Colo.	1.3	Palo Alto, Calif.	0.0
Seattle, Wash.	1.7	Ann Arbor, Mich.	0.0
Portland, Ore.	2.9	Lafayette, Ind.	0.0

10,000-25,000 Population

Kingsport, Tenn.	0.0
Walla Walla, Wash.	0.0
Salisbury, N. C.	0.0

KNOW THE LAW

by

ROBERT L. DONIGAN
Counsel

and

EDWARD C. FISHER
Associate Counsel
The Traffic Institute

RECENT CASES ILLUSTRATE RIGHT-OF-WAY RULE

A RECENT decision of the Supreme Court of Wisconsin and one by the Tennessee Court of Appeals serve to further confirm the "reasonable danger of collision" test as the "basic rule" of the right-of-way law. Both cases involved construction of statutes similar to Sec. 82, Act V, of the Uniform Vehicle Code. Neither of these state courts had heretofore passed upon the question in clear cut fashion.

In *Vogel v. Vetting*, 60 N. W. 2d. 399 (Wis.-Oct. 6, 1953), the defendant, in a civil damage suit, claimed that the plaintiff had failed to yield the right-of-way to him at an open intersection, notwithstanding both cars were approaching at approximately the same time, with defendant's car on the right. The jury had upheld defendant's contention. The plaintiff denied that the cars were approaching at the same time and sought to prove it by means of mathematical computation based upon measurements, speeds, and also by the fact that plaintiff's car was struck on the right side by the front of defendant's car—(the familiar question of "Who hit whom?") Arguing that since the evidence showed that his car was only half as far from the intersection as the other car, plaintiff urged that the simple mathematics and physical facts of the case showed that his car was in the intersection first.

The Supreme Court of Wisconsin, per Broadfoot, J., said that the trouble with this argument was that, applying the "reasonable danger of collision" rule, it was apparent that defendant's car was in the "danger zone" considering his speed and course of travel, hence the plaintiff should have yielded the right-of-way and that his failure to do so justified the jury in denying him any recovery.

Discussing the meaning and effect of the phrase "approximately the same time" as used in the Wisconsin statue (sec. 85.18 (1)) governing right-of-way at open intersections, the court said:

"The question depends largely upon the danger of collision when the relative distances and speeds of the two vehicles are considered. If they

indicate danger of collision if the two vehicles continue on their respective courses at the same rates of speed, the vehicle approaching from the left should yield the right-of-way.* * *

"Much difficulty has been encountered in the application of the word 'approximately' in the statute. *** We agree that the word has no technical meaning and probably was not a happy choice when the legislature used it. The word is used in the statutes of many states and the courts of those states have commented upon it at length. In the case of *Moore v. Kujath*, 225 Minn. 107, 29 N. W. 2d 883, 886, (175 ALR 1007) in dealing with a similar statute the court said: 'By *approximately*, the legislature must have meant the approach to an intersection of two vehicles so nearly at the same time that there would be imminent hazard of a collision if both continue the same course at the same speed. In that case he on the left should yield to him on the right. While the driver on the left is not required to come to a dead stop, as at a through highway stop sign, unless it is necessary to avoid a collision, he nevertheless must approach the intersection with his car so under control that he can yield the right-of-way to a vehicle within the danger zone on the right. Such must have been the legislative intent. Other states having the same statutory provisions have supported this interpretation.'

"We adopt the language of the Minnesota court in the hope that it will be of practical help to attorneys and trial judges dealing with the statute."

In *Shew v. Bailey*, 260 S. W. 2d 362 (Ct. of App.—Tenn.—1953), the court aptly summed up the open intersection right-of-way rule as follows:

"Within the meaning of this statute (Code sec. 2687; Motor Vehicle Laws 1951-2, sec. 47) vehicles are approaching an intersection 'at approximately the same time' when it would appear to a person of ordinary prudence, in the position of the driver of the vehicle approaching from the left of the other vehicle, that if the two continue on their respective courses, at the same rate of speed, a collision would be likely to occur.

"The question does not necessarily depend upon which vehicle enters the intersection first, but primarily upon the probability of a collision when the relative distances and speed of the two vehicles are considered. If, when so considered, there appears a likelihood of a collision unless one or the other alters its speed or course, then they are regarded as approaching the intersection at 'approximarely the same time,' notwithstanding that the vehicle approaching from the left arrives at the intersection first. * *

"Moreover it is held to be the duty of the driver approaching from the left to determine whether he can safely cross the intersecting street, and this duty does not end with his entry of the intersection but continues as long as there is danger of a collision."

Significant of the trend toward acceptance of the "reasonable danger of collision" test of the *basic rule* of right-of-way, also applicable to other intersection situations, is the language of the Supreme Court of Minnesota in *Peterson v. Lang*, 58 N. W. 2d 609, 613 (1953), wherein terms "imminent hazard" and "immediate hazard" were held to be synonymous and, when used in right-of-way statutes, have the same meaning as "reasonable likelihood or danger of a collision." In so holding the court said:

"No error occurred in substituting the word 'immediate' for the word 'imminent.' The 'imminent hazard of a collision' test is for all practical purposes synonymous with the 'reasonable likelihood or danger of a collision' test. The two tests involve only a difference of phraseology *and may be used interchangeably without error.*"

This holding is important in connection with right-of-way rules applicable to stop streets and left turns (Secs. 83 and 84, Act V, Uniform Vehicle Code) wherein the phrase "immediate hazard" is used. Under the reasoning of the Minnesota case the question of whether "vehicles * * * are approaching so closely on said through highway as to constitute an immediate hazard" is to be determined by the basic rule, i.e., is there reasonable danger of collision unless one of the drivers yields?

See also: *Van Zandt v. Goodman*, 181 Or. 80, 179 P. 2d 724 (1947) holding the rule of "reasonable danger of collision" applicable to left turn right-of-way. To the same effect are: *Autrey v. Swisher*, 155 F. 2d 18 (U. S. Ct. of App.-Fla.-1946); *French v. Utah Oil Ref. Co.*, 216 P. 2d 1002 (Utah-1950); *Cooley v. Baker*, 231 N. C. 533, 58 S. E. 2d 115 (1950); *Tally v. Howard*, 65 So. 2d 395 (La App.-1953).

* * *

Set Dates and Headquarters for 1954 IACP Conference

The 61st annual conference of the International Association of Chiefs of Police will be conducted Sept. 26-30, 1954, in New Orleans, La.

The Roosevelt Hotel will be conference headquarters.

Superintendent Joseph L. Scheuering of the New Orleans Police Department will be host to the conference.

* * *

SPEEDERS GIVEN FAIR WARNING

Motorists driving through Mt. Vernon, Wash., are offered a fair chance to save their money. A warning sign on the outskirts of the city tells all drivers that a speed limit of 25 miles per hour is enforced and that a $3 fine will be given for every mile per hour over the posted limit. In conclusion the sign invites motorists to: "Pick the speed you can afford."

FIRE PREVENTION AND CONTROL IN CONNECTION WITH TRAFFIC ACCIDENTS

Fire Makes Accidents Worse

21.010—Although fires occur in only a small percentage of traffic accidents, the accidents which do involve fire are often very serious. In a recent period, nearly one-fourth of all property damage done in 40 truck accidents was done in one accident which involved fire.

21.020—Fire can be a cause or a result of an accident. It can lead to the direct cause, for example, by causing a tire to blow or distracting a driver. More often, fire breaks out after the accident when gasoline or alcohol is spilled or a collision causes a short circuit.

21.030—Whether a cause or a result, fire always makes accidents worse. Some of the most severe of all traffic accidents result from fires, particularly when gasoline or explosives carriers are involved. In these, nearby property is often damaged and bystanders killed or injured. Hence, fire prevention has a top priority in accident investigation.

21.040—Most fire departments are glad to instruct police and other accident investigators in methods of fire prevention and control. However, without special training, you can do a lot to save lives, prevent property damage, and enhance the prestige of the police by taking the basic steps discussed in this section to prevent or control fire.

Exhibit 21-1. High octane gasoline fire illuminates Indiana countryside.

Anticipating Fires

21.107—When you arrive at the scene of an accident, always consider the possibility of fire breaking out. There are many likely sources: gasoline or other spilled inflammables, short circuits in wiring, flammable truck cargoes, and hot tires are among the most common.

21.114—Turn off ignition and lights of vehicles right away, whether engines are still running or not. This reduces the possibility of fire breaking out due to a short circuit under the hood of a car. Make it a habit to check vehicle switches on arrival at the scene.

21.121—Rescue occupants. Your first responsibility, of course, is to the occupants of vehicles. Remove them as quickly as you can. When injured are pinned in the wreckage you might ordinarily let them stay there until a doctor or necessary equipment arrives to help free them. But if there is danger of fire or explosion, you may not have time to wait. Get them out the best and quickest way you know. This may do additional injury, but it also may save lives.

21.128—Keep people away from spilled flammables. One of your most important and most urgent duties is to *protect the scene* of an accident which involves explosives or flammables carriers, especially if flammables are spilled. A bystander who smokes or strikes a match can very easily start a fire. *Keep people away from the scene.* The area to be protected may involve hundreds of square yards in some cases. In cities, police officers may be stationed at intersections to prevent vehicles and spectators from entering, or the area may be roped off. *Do not try to wash spillage away;* let the fire department take care of this. You may thus create a bigger hazard by further spreading flammables. Be careful that any flares or fusees you may set to warn oncoming traffic are not close enough to the wreckage to start a fire or cause an explosion. Gasoline vapors are heavier than air, and will drift downhill. Place flares at least 200 feet away from spilled flammables and, when possible, place them where the wind will blow vapors *away* from them.

21.135—Power lines. Keep everyone away from power lines that are down. Severe shocks may be received, especially in wet weather. Do not touch or try to move the lines. Summon the power company right away and let them handle it. If a power line touches an occupied vehicle, do not let the occupants get out. Persons touching the ground while in contact with any part of the vehicle might be electrocuted. Keep occupants inside and do not let anybody touch the outside of the vehicle until the power company has either removed the wire or cut off the power.

21.142—Fire hazard in cargo. Sometimes *a truck cargo that has shifted can catch fire after a collision.* For example, a truck carrying barrels of fuel was in a collision during which some of the barrels were ruptured and the fuel

Exhibit 21-2. Spilled gasoline is the greatest fire hazard in motor vehicle accidents. Protect bystanders and nearby property.

spilled. A spark later ignited the fuel and truck and cargo were a complete loss. Look into trucks and try to determine whether any danger exists. It may be necessary to take preventive measures such as unloading a truck or rearranging its cargo.

21.150—Short circuits. When there is considerable damage to the front end of a vehicle, or the frame is twisted out of shape, disconnect a battery cable. This removes the potential source of fire due to a short circuit in the electrical system. Disconnect either cable. A pair of pliers is the best tool. Take hold of the connection and wiggle it back and forth until it comes loose. Do not worry about doing damage to the car or the danger of shock; a new connection costs but a few cents and voltage is not high enough to hurt. If you do not have pliers or another suitable tool, wrap a dry cloth around your hand and jerk the cable off. However, try not to pull the top of the battery off, you might thus be splashed with battery acid. Some new-type batteries have a lever which makes it simple to disconnect a cable. All you have to do is pull the lever.

21.170—Tire fire potential. Sometimes a tire will start to burn *after a vehicle has stopped*, especially if the tire is flat or there has been heavy braking or skidding. Trucks, espe-

cially when loaded heavily, are most likely to have this trouble. Fire can start as long a time as 30 minutes after the vehicle has stopped, or almost anytime after starting up again. Air currents caused by the motion of the vehicle may fan a smouldering fire into a blaze.

21.177—Cool hot tires by dousing them with water. Advise the driver to change a hot tire before proceeding. If he must go on, advise him to have tire and brake lining inspected at the first opportunity.

21.184—Fire hazard under the hood. If gasoline or alcohol is spilled under the hood, you must, of course, not allow smoking within about ten feet of the vehicle. It is important that the engine is not started until these liquids have dried or been wiped up. A spark could cause them to catch fire. Squirting the liquids with a carbon-tetrachloride fire extinguisher helps to dry them up in a hurry.

21.191—Fire hazard in towing cars away. Take precautions to see that no flammable liquids are spilled during the process of *towing* wrecked vehicles away. It is possible to make a trail of gasoline which may catch fire. Also, see that no additional damage is done during the towing process. One reason for this, of course, is the increase in fire hazard due to short circuits and the like.

Handling Fires

21.207—Park at a safe distance. Be sure to park your own vehicle where it cannot catch fire. It may be too late to move it later on!

21.214—Set a good example by your own behavior. The way you handle yourself at the scene has an effect on others present. Try to give the appearance of being calm, unhurried, and in control of the situation. In most automobile fires, there is no great need for hurry unless, of course, people are trapped inside. Autos and parts of them burn quite slowly in most cases.

21.221—Some truck fires are more urgent, especially if the trucks are flammables or explosives carriers. Many trucks carry large quantities of gasoline in their fuel tanks. The tank is often located quite close to the cab, where flames will spread rapidly. In autos, fuel tanks are usually located in the rear, and flames in that area spread relatively slowly.

21.228—If a truck is involved, determine at once what it is carrying. Trucks are supposed to be labeled on the side but many are not. Sometimes you can find out what the cargo is just by looking in or asking someone. The driver probably has a bill of lading that will tell you. If a fire has already started, you may have to knock a hole in the side. Firemen sometimes do this under the protection of a chemical fog. Whenever the fire is inside, do not open the doors unless absolutely necessary. This feeds added air containing oxygen to the fire and makes it worse.

Exhibit 21-3. This truck ran off the roadway and spilled some of its contents. The driver carelessly threw a match into the ditch, igniting the gasoline. Notice that the crowd is kept at a safe distance.

21.235—When flammables or explosives carriers are involved you must keep people away from the scene as described in *21.128* and illustrated in Exhibit 21-3. If an explosion or a widespread fire is possible, warn occupants of nearby buildings, especially if the accident happened at night and they are likely to be sleeping. Try to get others to help you do this. Have buildings within a block in all directions vacated.

21.242—Isolate the fire. If you have time, and can do so without endangering yourself greatly, move what property you can from the danger area. For example, uncouple truck tractor—or have the driver do so if he is able—and move the section that is not on fire. Push or have owners drive standing vehicles to a safe place.

21.249—Don't shoot gas tanks. Police officers have been known to shoot holes in gas tanks of vehicles on fire to prevent an explosion. Don't do it! The theory is that holes will release pressure and lessen the danger of explosion. However, gas tanks are vented and there is no point in additional venting unless the tanks are full or almost full and the vents are covered. You usually have no way of telling how full the tanks are. Don't depend on gas gauge indicators. The spilled gasoline may very easily increase the hazard of spreading flaming fluid over a wider area. Of course, there is also danger of ricochet of the bullets. Auto tanks are located so they are difficult to get a clear shot at.

21.256—Fires in interiors. If seat cushions are on fire pull them out of

the vehicle when possible and wet thoroughly with water or a "carbon-tet" extinguisher. Cushions must be pulled apart around the burned area and wet thoroughly because fire in them, while not likely to burst into flames, often goes very deep. Handle truck cargo the same as seat cushions. Get it out of the truck if you can and use whatever extinguishing agent is appropriate for that type cargo. See Exhibit 21-4.

21.263—Use water sparingly inside of vehicle. Water can do great damage to the interior. If you have a carbon-tetrachloride extinguisher, use it on fires in the roof or floor of a vehicle. Use water if no extinguisher is available.

21.270—Fires under hood. Do not raise the hood if you can help it. This feeds oxygen to the flame and makes it worse. If you can, squirt extinguisher liquid through the radiator or vents. If it is an electrical fire, use certain types of extinguishers only. Some mixtures conduct electricity.

21.277—If you don't have an extinguisher and the fire is relatively small, throw or shovel dirt or sand on the flame, expecially for liquids afire. The smothering effect of these materials is excellent.

21.284—Fires in underside or tires of vehicle. Water is best for tires afire. The cooling and quenching action of water is most effective. Use an extinguisher if no water is available, or use a "tarp" or blanket to smother the flame. When the fire is underneath the vehicle and you have a vapo-liquid or "carbon-tet" extinguisher, aim at the top or source of the flames. This protects the upper part of the vehicle because extinguisher vapors float downward.

21.291—Clothing on fire. Do not let people run or move about! This, of course, fans the flames. Get them down on the ground. A football tackle is often necessary because most victims start to run. Smother flames with a blanket or other appropriate article, or simply roll the person over and over until flames are out. When the flames are out, it is often a good idea to douse victims in water so the flames do not break out again. First aid for burned persons is discussed as a separate subject.

After the Fire Is Out

21.310—If you used an extinguisher and it can be shut off, do so as soon as the fire is apparently out. Save the remainder of the contents in case fire breaks out again. If your extinguisher cannot be shut off, exhaust the contents on the burned area, particularly where fire is most likely to break out again.

21.320—To be as certain as possible that the fire does not break out again:

1. Do not allow vehicle to be started until all hazards are definitely removed—liquids dried, electrical system inspected, fuel system fixed, etc. Sparks from damaged parts dragging on the pavement, or from the ignition system, or

Exhibit 21-4.

Know Your Fire Extinguisher

The three types of extinguishers shown below are officially recommended for use in vehicle fires.	Fires in papers, wood, clothes, rubbish, etc. Extinguish by quenching and cooling effect of water.	Fires in gasoline, oils, paints, flammables. Extinguish by the smothering and cooling effect of water.	Fires in live electric equipment motors, fuse boxes, etc. Extinguish with non-conducting extinguishing agent.
Vaporizing Liquid Type. To operate: turn handle and pump, or squeeze valve on cylinder and direct stream. Recharge after use.	Small surface fires only.	Heat creates chemical reaction which smothers flame.	Non-conductor, will not damage equipment.
Carbon Dioxide Type. To operate: Pull locking pin. Hold horn in left hand, valve grip in right. Open valve close to flame. Recharge after use.	Small surface fires only.	Smothering action will not damage equipment or food supplies.	Non-conductor, will not damage electrical equipment.
Dry Chemical Type. To operate: pull pin in wheel, turn wheel to left to puncture cylinder. Squeeze valve in cylinder. Recharge after use.	Small surface fires only.	Chemical produces smothering action.	Non-conductor, will not damage equipment.

backfire in manifolds, muffler or tailpipe may ignite flammables. To make sure fire is not started by a short circuit, disconnect a battery cable.

2. Move as many burned parts as you can a safe distance from undamaged property. For example, have burned tires removed from vehicle and laid aside.

3. Do not permit striking matches or smoking near spilled liquids. Do not let anyone dump gasoline in the street. This spreads fire to other areas.

A collision involved a gasoline truck with two tanks. One tank of the truck caught fire and burned. The other tank did not catch fire. The truck had to be towed away after the fire was out. To make towing easier, the remaining gasoline was dumped into the street and it ran into sewers. In spite of precautions taken, the gasoline ignited. Fire burned in the street. There were explosions in the sewers. The fire spread through the sewers to nearby houses and some of them burned too. This is a freak event, of course, but it *can* happen.

4. Continue to protect the vehicle until the fire department takes over or you are sure that all fire hazards have been eliminated.

21.330—Try to determine cause of fire. It is often quite difficult to tell whether fire was a cause or a result of an accident. As part of the accident investigation, try to determine the cause of the fire. Firemen can often give you a lot of help on this.

1. Question drivers and passengers. One of them may have started the fire. For example, a passenger may have dropped a lighted cigarette in the upholstery causing a fire which distracted the driver and caused the accident.

2. Try to determine the condition of the vehicle prior to the accident. Faulty brake adjustment, leaking gas tanks, radiators with alcohol in them, and short circuits can cause fire.

3. Examine the wreckage and collect and preserve evidence as you would in any accident investigation.

4. Always suspect arson, especially in single-car accidents where there are no witnesses and when parked cars burn. Some people deliberately set a vehicle afire, usually to collect insurance. If you have reason to believe arson is involved, call upon the "arson detail" if there is one in your department, or a specialist in the field, to help you.

21.340—Sometimes vehicles are stolen, have an accident, catch fire, and are then abandoned by the thief. If you cannot find the driver of a vehicle, suspect that the vehicle was stolen. The owner must be informed of the whereabouts of and the damage to his vehicle. Take the registration number for this purpose. If plate is missing or the registration number obscured, take the motor or serial number. From it the state registry of motor vehicles can trace the owner.

21.350—Observe and take notes of the damaged parts of the vehicle and

other property. You may be asked for this information.

21.360—Remove vehicles from roadway, when fire is definitely out and you have all the short-lived evidence you need. Do not leave vehicles unattended because fire may again break out or pilferage may occur. Vehicles must be turned over to the owner or his representative, or taken to a garage for safe keeping.

21.370—Fill out a report as you would for any accident, except, of course, include facts about the fire—probably at least cause and extent of damage.

Fire Department Help

21.410—Call the fire department anytime fire has broken out, no matter how small it looks. Also call anytime you think there is *danger* of fire breaking out—if there is even a wisp of smoke, for example. Fire departments usually want to be called. Fires, of course, are their business. Any kind of fire counts on their record, and they are quite interested in having as little damage done as possible. In some locations, of course, no fire department is readily available. In rural accidents you may not be able to get firemen to leave the city limits. Try to get them to come if the hazard is potentially great—if a gasoline truck is on fire, for example.

21.420—The best way to call the fire department is through your dispatcher if you can contact him by radio. You can then stay at the scene and continue taking fire prevention or control measures, or go on with some other part of the investigation. If no radio is available, you may have to use a fire alarm box, or have someone else—perhaps a bystander—turn in the alarm. If an alarm box is used, be sure that firemen can locate the fire. You may have to stay at the box to direct them, or leave someone else there to do this. In some cities, it is necessary to wait at the alarm box and listen for an answering bell, which indicates that the alarm has gone through to the fire station. Telephone the fire department if no other facilities are available.

21.430—If you use a radio or telephone, be sure to give the exact location of the fire, its nature and degree of seriousness.

21.440—Here are some of the potentially dangerous conditions under which you ordinarily must summon the fire department:

1. If there is any spillage of flammables; unless you are in a rural area and spillage is quite small. Experienced firemen know best how to handle this kind of hazard and can help protect the scene.
2. If a vehicle has turned over or rolled on its side. Here, the chances are good that gasoline has leaked even if you cannot see it.
3. If there is considerable damage to the front end of a vehicle—wheels pushed back, radiator leaking, hood damaged—the electrical

system has probably been damaged or anti-freeze been spilled.

21.450—When the fire department arrives, tell what you have done and warn them of any additional hazards.

21.460—Of course, it is often necessary to summon other help too. For example, you may need other police to help handle crowds or set up detours. Medical service may be required for the injured, or power companies to handle problems with downed power lines.

References

21.910—Extensive information on the operation, care, and advantages of different types of fire extinguishers may be found in:

Standards for First Aid Fire Appliances as recommended by the National Fire Protection Association. 1953, 74 pages. NBFU Pamphlet No. 10, National Board of Fire Underwriters, 222 W. Adams Street, Chicago, Illinois. Single copies free.

21.920—Good material on the investigation of automobile fires with emphasis on arson, the auto fire problem, and various state arson statutes is contained in:

Manual for The Investigation of Automobile Fires. 1950, 86 pages. National Automobile Theft Bureau, 175 W. Jackson Blvd., Chicago 4, Illinois. Single copies free.

21.930—Little material is available on preventing and extinguishing fires in vehicles. However, these two, from which much information for this publication was obtained, will prove helpful:

Fire, It Can Happen to You, Fire Prevention and Fire Fighting Manual for Truck Drivers. 1947, 15 pages, mimeo. American Trucking Associations, Inc., 1424—16th Street, N. W., Washington 6, D. C. Single copies 25 cents.

Fire Extinguishment and Control, section 18 of the Accident Prevention Manual 1951, 16 pages. The section can be ordered separately from the National Safety Council, 425 North Michigan Avenue, Chicago, Illinois. Single copies 75 cents.

SPECIAL ACKNOWLEDGEMENTS

Exhibit 21-1. Photograph taken by Trooper Robert Cline, Indiana State Police.

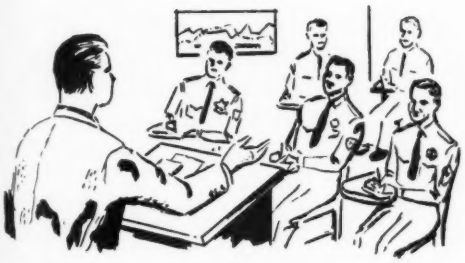
Exhibit 21-2. Photograph courtesy of Citizens Traffic Safety Board of Chicago.

Exhibit 21-3. Photograph taken by Officer Frank Benz, Indiana State Police.

Exhibit 21-4. Three illustrations of fire extinguishers provided by the General Detroit Corporation, 12272 E. Jefferson Ave., Detroit 32, Mich.

A HEEL AT THE WHEEL

Paul Jones, director of public information, National Safety Council, says the reason an apparently nice guy turns into a heel when he takes the wheel of an automobile is because he is a heel to start with.



TRAINING CALENDAR

(*All courses will be conducted at the Traffic Institute, Evanston, Ill., unless otherwise indicated.*)

Jan. 25-Feb. 5—Traffic Law Enforcement—Administration and Techniques, University of California, Los Angeles.

Jan 25-27—Traffic Court Conference, University of Oregon, Eugene, Ore.

Jan. 28-29—Regional Conference for TPA Graduates, Los Angeles, Calif.

Feb. 1-5—Traffic Court Conference, University of Southern California, Los Angeles.

Feb. 1-19—Police Traffic Records—Procedures and Use of Data.

Feb 8-10—Traffic Court Conference, University of Arizona, Tucson, Ariz.

Feb. 8-19—Traffic Law Enforcement—Administration and Techniques, Arizona State College, Tempe, Arizona.

Feb. 11-13—Traffic Court Conference, University of New Mexico, Albuquerque, N. M.

Feb. 15-March 5—Police Traffic Training Course (Introduction to Police Traffic Supervision).

Feb. 24-26—Traffic Court Conference, Austin, Tex.

March 1-5—Traffic Engineering—Field Study and Survey Methods.

March 6-7—Regional Conference for TPA Graduates, Louisville, Ky.

March 8-12—Traffic Engineering—Regulation and Control Devices.

March 15-19—Traffic Engineering—Traffic and Transportation Planning.

March 22-April 2—Accident Investigation—Administration and Techniques, Northeastern University, Boston, Mass.

March 24-26—Traffic Court Conference, University of Kansas, Lawrence, Kan.

Mar. 29-April 2—Chemical Tests for Intoxication, Northeastern University, Boston, Mass. (Tentative)

Mar. 29-April 2—Traffic Court Conference, Northeastern University, Boston, Mass.

March 31-April 2—Traffic Safety Seminar for Newspapermen, co-sponsored by Boston University and Northeastern University, Boston, Mass.

For complete information on these courses, write to Director of Training, Traffic Institute, Northwestern University, 1704 Judson Ave., Evanston, Ill.)

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REGIONAL CONFERENCES

for Institute TPA Graduates

Jan. 28-29
Los Angeles, Calif.

March 6-7
Louisville, Ky.

April 5-6
Pikesville, Md.